

## DETERMINANTS OF MENOPAUSAL SYMPTOMS AND ATTITUDE AMONG MIDDLE AGED WOMEN: THE CASE OF DANGILA TOWN, NORTH WEST ETHIOPIA

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### ABSTRACT

**Introduction:** The major concern of this study was to examine middle-aged women's menopausal symptoms experience and their attitude towards menopause in relation to some demographic factors.

**Method-**Three hundred middle-aged women with the age range of 35 and 70 were selected for the study using simple random sampling. A semi structured questionnaire was used to gather data from subjects. Quantitative analyses were used to analyze the obtained data.

**Results-** The mean age for natural menopause was 46.74 and its onset 44.06 year. Friends were the major source for menopausal related information, next health care providers and reading materials respectively. There are significant differences in menopausal attitude because of educational background, suggesting that illiterate women displayed better positive attitude than educated ones. Similarly, there are significant differences in menopausal symptoms and attitude across menopausal status. Pre-menopausal women experienced the highest menopausal symptoms than the pre and postmenopausal ones and postmenopausal women displayed positive attitude than pre and peri-menopausal ones.

**Conclusion:** It is concluded that menopausal status, education and awareness on menopause among middle aged women is an important determinant to develop positive attitude towards menopause.

**Keywords:** Determinants, Menopause, Symptoms, Attitude, Middle Age Women, Dangila Town

### INTRODUCTION

Middle age is one of the turning points in one's life as it brings along many changes. It roughly starts in the late 30s, for most of people it is the best period in life when their achievement is at the highest point. It is midway between the challenges of adulthood and despair of old age, comes the changes, i.e. menopause in women and which take a compulsory change of direction [1].

As a woman approaches menopause, the number of ovarian follicles declines producing less estrogen causing irregular menstrual period and a host of other physical discomforts. Owing to a lack of estrogen, women during menopause may experience hot flashes, night sweats, psychosomatic symptoms such as fatigue, irritability, forgetfulness, mood changes, sleep problems, depression, sexual problems, vaginal dryness, anxiety, emotional disturbance, poor relationship [2]. It is a transitional phase from an active to inactive reproductive state. It extends between 45 and 54 years with an average onset of 51 years [3].

In the past, there have been many researches done highlighting the negative effects associated with menopause. However, recent studies show that women view menopause as positive experience. Similarly, [4] indicated that, most women perceive menopause as a transition period rather than a problem. Even though physical responses, change a woman's perception of pleasure and satisfaction during intercourse remain the same or may even increase. A number of factors may be involved including freedom from fear of pregnancy and the couple may be rediscovering each other after losing contact during the challenging fulltime parenting years.

Perception, attitude and knowledge regarding the menopause and its transitional period, may differ from one female population to another. Numerous factors determine women's experiences; menopausal status, social background, education, occupation, physical and emotional health and general symptoms may influence the view of menopause [5]. Cultural influences are also expected to affect the menopausal transition experience, but little cross-cultural data exists.

There is wealth information available regarding menopausal women in the western society but African menopausal women have been almost neglected in menopausal research. Moreover, studies regarding attitude and experiences towards the menopause are scarce or none existing in African countries in general and in Ethiopia particular. To the researchers' knowledge, no studies have been done in Ethiopia that investigated Ethiopian women's experiences and attitude towards menopause, except medical aspects of menopause, such as the amount of bleeding, and related problems.

### Determinants of Menopausal Experience

As stated above, the menopausal experience can vary from women to women. The literature suggest that age at natural menopause, attitude, symptoms and knowledge of menopause vary among different ethnic groups, culture and population, which supports conclusions of other investigators that it is not possible to generalize from one population of women to another population about menopausal issues [6].

There are possible reasons, which made a difference in menopausal experience. To mention some of the factors: socioeconomic status, educational background, marital status, medical care, age women etc.

There is variability in determining the exact age of natural menopause, the average onset of menopause in the study of [7] in Mexico women, was 46.5 years. Other studies also show variations in reported age at menopause: 50.9 years among Norwegian women, 44.3 years among Mayan women and 48 years among the African women of Nigeria [8].

The research findings conducted in Saudi women's reported that there is a significant difference based on marital status, i.e. married women had almost four times more symptoms than unmarried women. This may be because married women have a different life history, such as sexual activity, use of birth control and the context

of the culture [8]. Inconsistent with the above research finding, [9] reported no significant differences were observed based on marital status and the experience of menopausal symptoms.

Past research [10] among Indonesian women found out that educated women reported more frequent menopause symptoms than non-educated women. As opposed to the above, [11] studies showed that less educated women reported more menopausal symptoms than highly educated women.

Regarding menopausal attitude, research conducted by [12] in Ecuador revealed that married women were not more concerned about the menopause than their counterparts were. Other researcher from Bahrain [13] found out that, divorced and widowed women had the most positive attitude towards menopause. The widowed and divorced women do have positive attitude since no longer have worry about the spouse view of menopause [13], it is also indicated that wives express positive attitude towards menopause than their husbands [14].

[13], explained that attitude towards menopause significantly differ based on education, with the university group having the least positive attitude and the illiterate having the most positive attitude. However, the findings of [15] in their study of the influence of demographic characteristics on women's attitude towards menopause did not find a significant relationship between women's attitude and their educational level.

Attitude towards menopause is highly related with the experience of menopausal symptoms [16]. Reported that positive attitude is associated with positive experience of menopause whereas negative attitude is associated with both negative symptoms and negative experiences.

Such empirical study variability tells us menopause is a unique experience for each woman. Hence, the symptoms, knowledge and attitude vary from individual to individual, from population to population, and culture to culture [4].

It is therefore, necessary to examine menopausal symptoms and attitude among middle-aged women, and determines differences of these experiences across different demographic variables in a specific context. Therefore, the research questions in this context will be addressing the following:

What is the mean age at natural menopause among Dangila's women?

What are Dangila's women major sources of information about menopause?

Are there significant differences in menopausal symptoms and attitude because of demographic variables (marital, educational and menopausal status)?

## MATERIALS AND METHODS

### Locale

Dangila town is found North West of Addis Ababa at the far distance of 480km in the Amhara National Regional Government of Awi Zone. The town consists of a population totaling more than 30,000 in 2007.

The people of the town consists /has different social strata, there are government employers, businesspersons, farmers and the like. The female population is so large (more than 60 percent) and most of middle-aged women were uneducated, do have many children, and their socioeconomic status was very low. Among the dwellers, there is a strong interaction and there are different social organization for social affairs like Iders (development association), and local religious associations. Such features of the town and the particular culture, which exists, might have influence in determining the biological and psychological wellbeing of women dwellers. This in turn affects their attitudes toward and the incidence of menopausal experiences through life.

## Data Sources

This study used the data collected from middle-aged women of Dangila town dwellers. Primary data were collected using questionnaire. The site has been chosen due to the fact that the researcher knows the area very well and do have enough information about the life of middle age women in the area and surrounding community, and this made the tasks of data collection easier.

## Participants and Sampling

The target populations of this study were women with the ages ranging from 35 and 70. It is reported that menopause typically occurs between the ages of 45 and 50, in this study in order to get information from the experience of pre-menopausal women, early aged menopausal women were also involved. Subjects were female Idler (social associations) members of Dangila town.

Using probability sampling procedure, out of the total target population (1500), three hundred women selected. Such large size sample (300) was taken to make the samples more representative. Moreover, to get approximately 20-50 respondents in each demographic characteristic (marital, educational and menopausal status), hence relevant statistical computations are possible. Out of the sample responses, 37 subjects were rejected for their either failed to respond to the items appropriately or never attempted a portion of the questionnaires. The analysis is therefore, made based on the response of 263 women aged between 35 and 70 years and the detailed profile of study participants were presented below.

## Demographic Characteristics of the Study Participants

The detailed profile of the current study participant their marital, educational and menopausal status, the frequencies and percentages are presented in Table 1 below (n=263).

**Table1: Samples Profile**

Demographic Variables	Levels	Frequency	Percentage
Marital status	Married	88	33.7
	Single	76	28.8
	Divorced	55	20.8
	Widowed	44	16.7
Educational level	Illiterate	63	23.9
	Primary (1 - 8 grade)	57	16.7
	Secondary(9 -12 grade)	62	23.5
	Certificate and above	81	31.6
	Premenopause	82	31.6
Menopausal status	Perimenopause	79	29.9
	Postmenopause	101	38.6
Respondents' age	35 - 48	83	31.55
	49 - 60	119	45.24
	61 - 70	61	22.19

Over all 263 middle aged women participated in this study. As can be seen from Table1, the largest proportions (n= 88, 33.7%) of the women were married, and 76(28.8%) of the respondents were single, while 55 (28%) of the study participants were divorced, and the remaining 44 (16.7%) respondents were widowed. Data gathered based on the educational background of participants display a relatively high proportion (n= 81, 31.6%) were certificate and above holders, respondents with primary and secondary education completed constitute 57 (16.7%) and 62 (23.5%), respectively. The respondents who were illiterate constitute 63 (23.9%).

Furthermore, data were obtained on the respondents' menopausal status based on menstrual history within the last 12 consecutive months. Out of all participants, 101 (38.6%) were post menopause, i.e. they had attained menopause, 79 (29.9%) were undergoing menopause, i.e. they were in the process of menopause, while the remaining 82 (31.6%) were premenopause. From the total respondents 119(45.24%) were in the age range between of 35 and

48, whereas 83 (31.55 %) between 49 and 60, and the remaining 61 (22.19%) were between 61 and 70 age range.

### Study Instruments

As it has been indicated elsewhere, data collected using semi structured questionnaire and interview. Those women who are literate and educated fill the questions by their own, while women who are illiterate were interviewed and the questionnaire filled out by female assistants. The intention of the instrument items were to evaluate the prevalence of various physical, psychological and social symptoms, changes and problems, and their attitude towards menopausal life changes as perceived by participants. Scaled questionnaires were used based on literatures and adapted for the purpose. The questionnaire has three parts. The first part contained socio demographic characteristics. The second part is designed to assess the prevalence of menopausal symptoms. The last part was designed to assess the respondent, attitude towards menopause.

A pilot study was conducted in the study area to check and improve the reliability and validity of the instrument. The results of the internal consistency reliability of the Amharic version of the questionnaire has been assessed by Crobanich's alpha which were 0.87 for symptoms scale and 0.79 for attitude scale based on a pilot of 30 women. Content validity of the Amharic version of the questionnaire has been assessed by three experts in the field.

### Data Analysis

Quantitative analyses were used to analyze the data obtained through the scales. The collected data was coded, entered and analyzed using the statistical package SPSS version 20.0.

First, relevant descriptive statistics (Means, Standard Deviations and Rank order) were computed.

Second, one-way analysis of variance (ANOVA) was performed to determine whether there exist statistically differences among women's status (marital, educational, menopausal) and in the mean scores of menopausal symptoms and attitudes. If so, which mean score made the highest difference by using the post hoc analysis method, particularly Tukey. Alpha value of 0.05 was used for significance tests.

## RESULTS

### Age at Natural Menopause

In this subsection, descriptive statistics of dependent variables of the study i.e., age of participants, onset and age at natural menopause based on a close analysis of menstrual history of the past twelve month is presented below.

**Table 2: Number of Observation, Mean and Std. Deviation Comparison of Dependent Variables**

Variables (dependent)	N	Minimum	Maximum	Mean	SD
Age of Participants	263	35.00	70.00	46.74	7.64
Onset of menopause age	79	36.00	54.00	44.03	3.29
Age at natural menopause	101	38.00	53.00	46.35	2.91

As the above Table 2 displays, a mean age of the study participants is 46.74 years. Age at the onset of menopause was reported by 79 women (who were undergoing menopause, i.e. they had intermittent period in the last 12 months). Mean age for the onset of menopause among menopausal women (n=79) was 44.03 years. Women who had attained postmenopausal stage (n=101) reported age at natural menopause. The mean age at natural menopause is 46.35 years, and the minimum age at natural menopause is 38 and the maximum 53 years.

### Sources on Menopause-Related Information

In this section, respondents' primary source of menopause-related information based on rank order is presented.

**Table 3: Primary source of menopause-Related Information**

No	Source of Information	Frequency	Percentage	Rank
1	Friend	187	70.83	1
2	Medical care providers	181	68.75	2
3	Books, Magazines, Journals	176	66.66	3
4	Mass media (Radio, TV)	165	62.50	4
5	Relatives	148	56.25	5
6	Educational sessions	115	43.75	6
7	Community Elders	60	22.91	7

As Table 4 illustrates, on the basis of rank order 187 (70.83%) women reported that their friends are their primary sources for obtaining information regarding the menopausal events and change, followed by medical practitioners 181 (68.75%) and through reading materials 176 (66.66%). In contrast, educational sessions and community elders are the least frequently cited sources of menopausal information with the rank of six and seven.

### Respondents' Menopausal Symptoms and Attitude

This section gives test of significance differences on menopausal knowledge, symptoms and attitude across demographic variables (marital, educational and menopausal status).

### Test of Significance on Menopausal Symptoms and Attitude across Marital Status

This section presents the results of one-way ANOVA carried out to see if there are differences among women based on marital statuses (married, single, divorced and widowed) in menopausal symptoms and attitude.

**Table 4: Summary of One-Way ANOVA on Menopausal Symptoms and Attitude by Marital Status**

Source of Variation	Sum square	Mean square	df	F	Sig.
Between groups	107.00	35.66	3	.331	.803
Within groups	27994.61	107.36	260		
Total	28101.62	263			
Between groups	28880.31	962.77	3	2.246	.083
Within groups	111460.8	428.69	260		
Total	1143491.1	263			

\*P<0.05

The result of ANOVA indicated that there is no significant differences (F (3, 260) = 0.331, p> 0.05) in menopausal symptoms across marital levels. The summary table also revealed the non-existence of significant differences (F (3, 260) = 2.246, p>0.05) in menopausal attitude across marital status. This implies that, there is no as such significant difference in menopausal symptoms and attitude across marital status and marital status does not made difference menopausal symptoms and attitude significantly.

### Test of significance on Menopausal Symptoms and Attitude with respect to Educational Status

This section of analysis presents the existence or non-existence of differences among educational levels (illiterate, primary and secondary school completed, and certificate and above holders) in menopausal symptoms and attitude using ANOVA.

**Table 5: Summary of One-Way ANOVA on Menopausal Symptoms and Attitude by Education Levels**

Source of Variation	Sum square	Mean square	df	F	Sig.
Between groups	563.63	187.88	3	1.774	.153
Within groups	27537.7	105.915	260		
Total	28101.62	263			
Between groups	10892.98	3630.99	3	9.125*	.000
Within groups	103456.2	397.90	260		

Total	114349.1	263
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\*P&lt;0.05

The result of the ANOVA indicated that, there is no significant difference ( $F(3,260) = 1.774$ ,  $p > 0.05$ ) in menopausal symptoms in relation to educational background of women. However, there is a statistically significant difference in menopausal attitudes across educational levels ( $F(3,260) = 9.15$ ,  $p < 0.05$ ). That means education has an influence in menopausal attitude among middle age women. Thus, closer investigation of post-hoc ANOVA analysis is needed to identify which mean group contribute more relative to others and this is presented below.

**Table 6: Post-hoc Comparisons for the Mean Differences in Menopausal Attitude across Educational Levels (Tukey procedure)**

Classification Level	X	1	2	3	4
		153.87	138.07	139.72	138.75
Illiterate women	153.87		15.80*	14.14*	15.11*
Primary completed	138.07			1.65	0.65
Secondary completed	139.72				0.96
Certificate and above	138.75				

\* Pair of groups significantly different ( $p < 0.05$ ).

As shown above the result from Tukey procedure revealed that, the mean attitudinal score for individuals with no formal education background (illiterate) was found to be significantly higher than the mean value for those both with primary and with secondary school experience women.

Similarly, the mean score on menopause attitude of illiterate women is again significantly higher than the value for the subject in the certificates and above holders. No significant difference was found for the other combinations.

#### Test of significance on Menopausal Symptoms and Attitude based on Menopausal Status

Further analysis was done to find out whether these mean differences are statistically significant or not. This section presents test of significance among women with different educational levels (illiterate, primary and secondary school completed, and certificate and above holders) in menopausal symptoms and attitude using ANOVA.

**Table 8: Summary of One-Way ANOVA on Menopausal Symptoms and Attitude by Menopausal Status**

Source of Variation	Sum square	Mean square	df.	F.	Sig.
Between groups	3269.14	1089.71	2	11.409*	.000
Within groups	24832.47	95.51	261		
Total	28101.62		263		
Between groups	6816.36	2272.12	2	5.494*	.001
Within groups	107532.8	413.58	261		
Total	114349.1		263		

\*P&lt;0.05

As the ANOVA table revealed, there is a statistical significant difference among women in different menopausal status with respect to symptoms and attitude toward menopause ( $F(2,261) = 11.409$ ,  $p < 0.05$  and  $F(2,261) = 5.494$ ,  $p < 0.05$ , respectively). This implies that menopausal symptoms and attitude are influenced by menopausal status of women. A closer investigation of post-hoc analysis was needed to identify which mean group contribute more relative to others and this is presented below.

**Table 8: Post-hoc Comparisons for the Mean Differences in Menopausal Symptoms across Menopausal Status**

Classification Level	X	1	2	3
		24.63	33.24	28.43
Pre-menopause	24.63		8.75*	3.94*
Peri-menopause	33.24			4.80*
Post-menopause	28.43			

\*P&lt;0.05

The Tukey computed above for women grouped in the three menopausal levels indicated that those with peri-menopause status have significant higher mean menopausal symptoms score than those in pre and post-menopause category. There is again a statistically significant difference in the mean menopausal symptoms scores between pre and post menopause women, the post menopause ones scoring significantly higher.

**Table 9: Post-hoc Comparisons for Mean Difference in Menopause Attitude across Menopausal Status**

Classification Level	X	1	2	3
		138.70	138.74	148.57
Pre-menopause	138.70		0.325	10.15*
Peri-menopause	138.70			9.83*
Post-menopause	148.57			

\*P&lt;0.05

Post-menopause women have menopausal attitude score, which is significantly higher than those pre and peri-menopause women are. There is no statistically significant difference is observed in menopausal attitude between pre and peri-menopausal women.

## DISCUSSION

### Age at Natural menopause

The results obtained from descriptive analysis of dependent variables indicated that, the mean age for the onset at natural menopause was 46.35 years among Ethiopian women in Dangila town. The average age of menopause in this study is comparable to the study of [7] findings of Mexico women, which was 46.5 years. Other studies variations in reported age at menopause are 50.9 years among Norwegian women, 44.3 years among Mayan women and 48 years among the African women of Nigeria [8].

There is no way to know exactly which period will be the last. The process starts to occur in women the late 30s. However, some women experience menstrual changes in their thirties, others not until their sixties, but the average age for menopause at about 51 [17]. For these reason, it could be understood that there is variation in menopausal onset and termination [18]. Also supports this, the exact age at menopause varies from population to population.

There are many reasons for this variation. For instance, [19] explained that variations in reported ages at menopause across cultures could be attributed to methodological problems such as biased sample selection, retrospective recall errors, inappropriate statistical analysis, genetic backgrounds, and bicultural factors such as life style, diet, infectious disease, general health, and socio economic status such as malnutrition, contaminated environment and difficulty to access medical care.

These reasons might be partly true in this study result for the observed age difference with previous study findings; especially respondents might not be to remember the correct month and year when their menstruation ceased. Lack of medical care, and socio economic factors like malnutrition might affect the country like ours, where the feeding habits of the people are not as such good in quality and amount. As a result, there would be difference in the reported age of menopause.

### Primary Source of Menopause – Related Information

As presented from the frequencies analysis, most women source of information were obtained from their friends, followed by medical professionals and thirdly through reading materials (like books, magazines, and journals). However, differing from this finding [20],

reported that women's sources of menopausal knowledge were medical providers and media. A study on Taiwanese women has also indicated that most frequently source of information through were reading materials and friends <sup>[21]</sup>. Other researcher from Ecuador <sup>[12]</sup> reported that television and physicians were the main sources for women to obtained information about menopause.

On the contrary to the above studies there is the existence of inconsistency in terms of sources of information, somehow the present study similar to the finding of <sup>[22]</sup>. They found that the primary sources of menopausal related information among Japanese women were friends (69%) followed by magazines (57%) and physicians (26%).

Such differences in sources of information could due to socioeconomic status of the community and family, accessibility to information, and discussion habits of the people. In addition, these cross-cultural differences could be important in implementing programs directed toward increasing the knowledge of menopause in a specific population <sup>[12]</sup>.

### Differences in Menopausal Symptoms and Attitude across Independent Variables

The findings showed that there was no significant difference in the prevalence of menopausal symptoms across marital status. This is expressed by the mean differences of the four levels of marital status, which were close to each other, and almost equal with the total mean score. The present study goes contrary to the findings of past researcher conducted among Saudi women, whereby there is a significant difference among marital status, i.e. married women was shown almost four times more symptoms than unmarried women were. This may be because married women have a different life history, such as sexual activity, use of birth control and the context of the culture <sup>[8]</sup>.

However, consistent with the present research finding, <sup>[9]</sup> reported no significant difference among women with difference in their marital status and the experience of menopausal symptoms. The non-existence of significant difference among Ethiopians, especially, Dangila's women in menopausal symptoms partly may be attributed to the fact that the culture in which they are living influence women relatively in a similar way and pattern regardless of their marital status. Hence, the reported experiences of menopausal symptoms become relatively similar.

Similar to the above findings there was no significant difference in menopausal symptoms across educational categories. As it has been indicated in the mean difference comparison, illiterate women obtained lowest mean while certificate and above holders score the highest menopausal symptoms mean scores, but this difference was not statistically significant.

Even though the outcome of the present study did not show significant differences in experienced symptoms, it was in conformity with past research carried out <sup>[10]</sup> among Indonesian women; it was found out that educated women reported more frequent menopause symptoms than non- educated women. Different from this, <sup>[11]</sup> studies showed that less educated women reported more menopausal symptoms than higher educated women did.

It is obvious that menopausal symptoms differed across different culture. However, lack of significant difference among Ethiopia women, especially Dangila's might be partially caused by because there is no as such big educational background differences on the part of educated women. As well as the similarity in the way of life and strong interaction among the women population regardless of educational background seem to have contributing factors to the lack of difference in menopausal experiences among middle-aged women in menopausal symptoms.

According to this study, the result from menopausal symptoms across menopausal status is found to be statistically significant. The post-hoc results have again indicated that there are mean differences among the different groups, and the perimenopause women's score is significantly the highest mean, while the pre

menopauses score is the lowest mean.

Different literature confirmed that women experience different symptoms at different phase of menopause. According to <sup>[23]</sup>, most women experience little or no physical comfort during premenopausal period. Most common are hot flashes but many women never having them. Similarly, <sup>[24]</sup> reported that women experience undesirable age related memory changes (e.g. forgetting) in the premenopause period. Sleeping is the highest at the age around 43 in the premenopause period than post menopause phase. Low sexual desires, the most common sexual problem for women before and after menopause because of hormonal changes are apparent <sup>[25]</sup>.

Similarly, in this study the frequency of menopausal symptoms were high in the perimenopause stage than others. One possible explanation for this is that, at the very beginning women are new for different symptoms and feel them strongly as well as report more menopausal complaints, through time they got experienced and would not sense or experience strongly like early periods of menopause and would not report much symptoms.

The outcome of F- test analysis in this study showed that, there is no significant difference in menopausal attitudes across marital status. Research conducted by <sup>[12]</sup> in Ecuador revealed a similar result; married women were not concerned about menopause in a higher rate than their counterparts were. Other researcher from Bahrain <sup>[13]</sup> found out that divorced and widowed women had the most positive attitude towards menopause.

This also holds true in this study; as it is easily shown in the mean differences. Widowed women obtained the highest score while divorced, married and single women were ranked in the next three ranks, respectively.

The widowed and divorced women do have positive attitude since they no longer have worry about the spouse view of menopause <sup>[13]</sup>, and the expectations that wives express among positive attitude towards menopause than their husbands <sup>[14]</sup>. These explanations might be to some extent true in the current research, in addition to the role-played by culture for promoting positive attitude towards menopause, especially for widowed and divorced ones.

The analysis that employed ANOVA and the subsequent post-hoc comparisons have clearly indicated that illiterate women exhibited significantly highest positive attitude towards menopause as compared to those that have primary, secondary and certificate and above educational background.

Such a finding goes in line with <sup>[13]</sup>, which indicated that attitude towards menopause significantly, differed among women with different categories of education, with the university group having the least positive attitude and the illiterate having the most positive attitude. The same findings had been observed in Taiwanese and Ecuadorian women in whom education had a significantly negative impact on menopausal perception <sup>[21, 12]</sup>.

However, on the contrary to this study findings, <sup>[15]</sup> in their study of the influence of demographic characteristics on women's attitude towards menopause did not find a significant relationship between women attitude and their educational level.

Knowing more about menopause might empower women to better cope with menopausal changes <sup>[26]</sup> and educated women had more opportunity to hear the stereotypes and social rumors of menopause, which may have contribution to for less positive attitude development, and inconsistent result between education and menopausal attitude <sup>[15]</sup>.

The researcher of this study partly share this explanation for the less positive attitude of educated women and the more positive attitude of illiterate women. Due to the fact that lack of exposure to scientific information on the side of uneducated and listening to negative aspects and rumors of menopause in the side of educated ones might be contributed in this study differences in attitude and for the perception of menopause as a normal natural event that they accept it positively.

Results of the ANOVA and analyses made using the post-hoc show that there is significant difference in menopausal attitude across menopausal status and those who had attained menopause significantly surpassed those premenopausal and with in the process. This implies that menopausal attitude is strongly related to menopausal status with pre menopause women tended to be less positive while postmenopausal are more positive towards it.

Such a finding concurs with other studies. According to<sup>[27]</sup>, most women who have gone through menopause view it positively, more than younger women do. Again, other researchers<sup>[28, 29]</sup> reported that postmenopausal and older women consistently express feelings that are more positive about menopause than do younger women are.

Hence, it is easily understood that direct experience with menopause is playing a role in attitude, i.e. those who have not yet experienced menopause are more afraid of what to expect during menopause on the contrary postmenopausal women had already gone through this period of time and thus became less susceptible to false stereotypes. This indicates that once women have gone through menopause they find it to be less troubling than they were anticipating earlier in life.

## CONCLUSION

From the above finding, one may come up with the following conclusions:

Mean age of Dangila women at natural menopause was 46.74 year, based on the report from those that had attained menopause (Postmenopausal). Similarly the average on set of menopause in light of menstrual history of women who were in the process (perimenopausal) was 44.06. Here, due to the fact that there is a difficulty to recall the exact month and year when their menstruation cycle ceased, the average age for termination of menopause was not determined.

The primary source for obtaining information regarding menopausal life event and changes among women was friends followed by medical service providers and reading materials like books, magazines, journals.

The presence of significant differences across independent variables reflected that educational background has an impact on menopausal attitude and illiterate women have a positive attitude towards menopause than other demographic factors. However, menopausal symptoms were experienced similarly regardless of women educational background. Again, menopausal status has an influence in women experience of symptoms and attitude. Post-menopause women had more positive attitude towards menopause than the pre and peri-menopausal women. Moreover, women who were in the process of menopause (peri-menopausal) experienced more symptoms than the rest groups.

## REFERENCES

- Mitchell, A. Psychological medicine in family practice 1971; London: Baillier Tindall Publisher.
- Rosemeier, H., & Schultz, B. Psychological aspects of menopause 2001; Retrieved February 1, 2009 from Addis Ababa University Web: <http://www.kup.at/kup/pdf/4973.pdf>.
- Fuh J, et al. Quality of life and menopausal transition for middle aged women: on Kinsmen Island. [Electronic version]. Journal of Menopause 2003; 13: 56-66.
- Olson D, Defrain J. Marriage and the family: Diversity and strengths 2000; California: May Field Publishing High Company.
- Nelson H, et al. Post-menopausal hormone replacement therapy. American Journal of Menopause 2002; 288 (7): 872-881.
- Theisen S, et al. Predictors of midlife women's attitudes toward menopause. Health value 1995; 19 (3): 22-31.
- Garrido M, et al. Age of natural menopause among women in México City. International Journal of Gynecology 1996; 53: 159-166.
- Al-Sejari M. Age at natural menopause and menopausal symptoms among Saudi Arabian women in Alkhobar. [Electronic Version]. Journal of Menopause in Arab World 2005; 9: 45-74.
- Thompson A, et al. Menopausal age Symptology in a general practice. J Biosoc Sci 1973; 5: 71- 82.
- Flint M, Samil R. Cultural and subculture meanings of menopause. European Journal of Menopause 1990; 4: 173-180.
- Gold E, et al. Relations of demographic and lifestyle factors to symptoms in multi racial population of women 40-55 years of age. Am J Epidemiol 2000; 152: 456- 467.
- Leon P, Chedraui P, Hidalgo L, Ortiz F. Perceptions and attitudes toward the menopause among middle aged women from Guayaquil, Ecuador. European Journal of Menopause 2007; 57: 233-238.
- Jassim G, Al-Shboul Q. Attitudes of Bahrainis women towards the menopause. [Electronic version]. Journal of Menopause in Arab World 2007; 13: 14 - 34.
- Papini D, et al. Attitude toward menopause among married middle aged adults Journal of Women Heath 2003; 4(3): 28-34.
- Wilbur J, Montgomery A. The influence of demographic characteristics, menopausal status, and symptoms on women's attitudes toward menopause. Journal of Women Health 1995; 23: 19- 39.
- Dennerstein L. et al. A prospective population based study of menopausal symptoms. Obstet Gynecol 1994; 96(3): 351-358.
- Papalia, D, Old S, Feldman R. Human Development 2001; Boston: McGraw Hill Companies.
- Kaw, D. Adjustment patterns between pre and post menopausal rural women. Indiana Journal of Applied psychology 1994; 25 (1): 398-417.
- Beyene Y. Cultural significance and physiological manifestation of Menopause. Bicultural, Medical and Psychiatry 1989; 10 (1): 47-71.
- Fistonic I, Srecko C, Marina F, and Ivan S. Menopause in Croatia. Socio demographic characteristics, women's attitude and source of information, compliance with HRT. Maturitas 2004; 47: 91-98.
- Cheng M, Fuh J, Wang S. Attitude toward menopause among middle aged women: a community \ Survey in an island of Taiwan. European Journal of Menopause 2005; 52: 348-355.
- Lock M. Ambiguities of aging: Japanese experience and perceptions of menopause. American Journal of Menopause 1986; 10: 23-46.
- Kendig S, Sanford, D. Midlife and menopause: Celebrating women's health, 4<sup>th</sup> ed 1998; New York: Harcourt Publisher.
- Birge S. Estrogen and cognition. International Journal of Gynecology 2003; 27(6): 16- 20.
- Bassoon R, Post-menopausal Sexual Dysfunction: Fact or fiction. Women's Health in Primary Care. Journal of Adulthood Health 2001; 1(5): 317-329.
- Larocco S, Polit D. Women's knowledge about the menopause. Nurse Research 1980; 29: 10-13.
- Avis N. Women's health at midlife. Psychol Med 1999; 25: 63-77.
- Abraham S, Perz J, Clarkson R, Llewellyn J. Australian women's perceptions of hormone replacement therapy over 10 Years. European Journal of Menopause 1995; 21: 91-95.
- Neugarten B. The awareness of middle age. Journal of Adulthood Health 1967; 20(4): 432-445.